AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A method for multi-dimensional color transformation comprising:

(a) generating a multi-dimensional color transformation for transformation of ~~a~~ source device coordinates ~~image~~ to ~~a~~ destination device coordinates ~~image~~; and

(b) constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of selected color image data specified by ~~present in~~ the source device coordinates ~~image~~.

Claim 2 (Original): The method of claim 1, wherein the multi-dimensional color transformation is configured based on the constraints imposed in step (b).

Claim 3 (Currently Amended): The method of claim 1, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of selected colorants present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 4 (Currently Amended): The method of claim 1, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of black colorant present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 5 (Currently Amended): The method of claim 1, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of one or more chromatic colorants present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 6 (Currently Amended): The method of claim 1, further comprising:

(c) constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent introduction of selected color image data not ~~present in the source image~~ specified by the source device coordinates.

Claim 7 (Currently Amended): The method of claim 6, wherein step (c) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of selected colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 8 (Currently Amended): The method of claim 6, wherein step (c) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of black colorant not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 9 (Currently Amended): The method of claim 6, wherein step (c) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of one or more chromatic colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 10 (Currently Amended): The method of claim 6, wherein step (c) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of chromatic colorants for black-only dots ~~in the source image~~ specified by the source device coordinates.

Claim 11 (Currently Amended): The method of claim 6, further comprising constraining the destination device coordinates produced by the multi-dimensional color transformation in at least one of steps (b) and (c) based at least in part on constraints specified by a user.

Claim 12 (Currently Amended): The method of claim 1, wherein each of the source device coordinates and destination device coordinates ~~images~~ is defined by cyan, magenta, yellow, and black (CMYK) colorants.

Claim 13 (Currently Amended): A method for multi-dimensional color transformation comprising:

(a) generating a multi-dimensional color transformation for transformation of ~~a~~ source device coordinates ~~image~~ to ~~a~~ destination device coordinates ~~image~~; and

(b) constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent introduction of selected color image data not specified by ~~present in~~ the source device coordinates ~~image~~.

Claim 14 (Original): The method of claim 13, wherein the multi-dimensional color transformation is configured based on the constraints imposed in step (b).

Claim 15 (Currently Amended): The method of claim 13, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of selected colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 16 (Currently Amended): The method of claim 13, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of black colorant not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 17 (Currently Amended): The method of claim 13, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of one or more chromatic colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 18 (Currently Amended): The method of claim 13, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of chromatic colorants for black-only dots ~~in the source image~~ specified by the source device coordinates.

Claim 19 (Currently Amended): The method of claim 13, wherein each of the source device coordinates and destination device coordinates ~~images~~ is defined by cyan, magenta, yellow, and black (CMYK) colorants.

Claim 20 (Currently Amended): A system for multi-dimensional color transformation comprising:

a processor that generates a multi-dimensional color transformation for transformation of ~~a~~ source device coordinates ~~image~~ to ~~a~~ destination device coordinates ~~image~~; and

a memory that stores constraints,

wherein the processor is programmed to apply the constraints to constrain the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of selected color image data specified by ~~present in~~ the source device coordinates ~~image~~.

Claim 21 (Original): The system of claim 20, wherein the multi-dimensional color transformation is configured based on the constraints applied by the processor.

Claim 22 (Currently Amended): The system of claim 20, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of selected colorants present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 23 (Currently Amended): The system of claim 20, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of black colorant present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 24 (Currently Amended): The system of claim 20, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of one or more chromatic colorants present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 25 (Currently Amended): The system of claim 20, wherein the processor is further programmed to constrain the destination device coordinates produced by the multi-dimensional color transformation to prevent introduction of selected color image data not present ~~in the source image~~ specified by the source device coordinates.

Claim 26 (Currently Amended): The system of claim 25, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of selected colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 27 (Currently Amended): The system of claim 25, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of black colorant not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 28 (Currently Amended): The system of claim 25, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of one or more chromatic colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 29 (Currently Amended): The system of claim 25, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of chromatic colorants for black-only dots ~~in the source image~~ specified by the source device coordinates.

Claim 30 (Currently Amended): The system of claim 20, wherein each of the source device coordinates and destination device coordinates ~~images~~ is defined by cyan, magenta, yellow, and black (CMYK) colorants.

Claim 31 (Currently Amended): A system for multi-dimensional color transformation comprising:

a processor that generates a multi-dimensional color transformation for transformation of ~~a~~ source device coordinates ~~image~~ to ~~a~~ destination device coordinates ~~image~~; and

a memory that stores constraints,

wherein the processor is programmed to apply the constraints to constrain the destination device coordinates produced by the multi-dimensional color transformation to prevent introduction of selected color image data not specified by ~~present in~~ the source device coordinates ~~image~~.

Claim 32 (Original): The system of claim 31, wherein the multi-dimensional color transformation is configured based on the constraints applied by the processor.

Claim 33 (Currently Amended): The system of claim 31, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of selected colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 34 (Currently Amended): The system of claim 31, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of black colorant not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 35 (Currently Amended): The system of claim 31, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of one or more chromatic colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 36 (Currently Amended): The system of claim 31, wherein the processor constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of chromatic colorants for black-only dots ~~in the source image~~ specified by the source device coordinates.

Claim 37 (Currently Amended): The system of claim 31, wherein each of the source device coordinates and destination device coordinates ~~images~~ is defined by cyan, magenta, yellow, and black (CMYK) colorants.

Claim 38 (Currently Amended): A computer-readable medium containing program code that when executed by a processor:

(a) generates a multi-dimensional color transformation for transformation of ~~a~~ source device coordinates ~~image~~ to ~~a~~ destination device coordinates ~~image~~; and

(b) constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of selected color image data specified by ~~present in~~ the source device coordinates ~~image~~.

Claim 39 (Original): The computer-readable medium of claim 38, wherein the multi-dimensional color transformation is configured based on the constraints imposed in step (b).

Claim 40 (Currently Amended): The computer-readable medium of claim 38, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of selected colorants present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 41 (Currently Amended): The computer-readable medium of claim 38, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of black colorant present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 42 (Currently Amended): The computer-readable medium ~~method~~ of claim 38, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent removal of one or more chromatic colorants present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 43 (Currently Amended): The computer-readable medium of claim 38, wherein the program code is configured such that, when executed, the processor:

(c) constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent introduction of selected color image data not present ~~in the source image~~ specified by the source device coordinates.

Claim 44 (Currently Amended): The computer-readable medium of claim 43, wherein step (c) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of selected colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 45 (Currently Amended): The computer-readable medium of claim 43, wherein step (c) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of black colorant not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 46 (Currently Amended): The computer-readable medium of claim 43, wherein step (c) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of one or more chromatic colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 47 (Currently Amended): The computer-readable medium of claim 43, wherein step (c) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of chromatic colorants for black-only dots ~~in the source image~~ specified by the source device coordinates.

Claim 48 (Currently Amended): The computer-readable medium of claim 43, wherein the program code is configured such that, when executed, the processor constrains the destination device coordinates produced by the multi-dimensional color transformation in at least one of steps (b) and (c) based at least in part on constraints specified by a user.

Claim 49 (Currently Amended): The computer-readable medium of claim 38, wherein each of the source device coordinates and destination device coordinates ~~images~~ is defined by cyan, magenta, yellow, and black (CMYK) colorants.

Claim 50 (Currently Amended): A computer-readable medium containing program code that when executed by a processor:

(a) generates a multi-dimensional color transformation for transformation of ~~a~~ source device coordinates ~~image~~ to ~~a~~ destination device coordinates ~~image~~; and

(b) constrains the destination device coordinates produced by the multi-dimensional color transformation to prevent introduction of selected color image data not specified by ~~present in~~ the source device coordinates ~~image~~.

Claim 51 (Original): The computer-readable medium of claim 50, wherein the multi-dimensional color transformation is configured based on the constraints imposed in step (b).

Claim 52 (Currently Amended): The computer-readable medium of claim 50, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of selected colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 53 (Currently Amended): The computer-readable medium of claim 50, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of black colorant not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 54 (Currently Amended): The computer-readable medium of claim 50, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of one or more chromatic colorants not present at corresponding dots ~~in the source image~~ specified by the source device coordinates.

Claim 55 (Currently Amended): The computer-readable medium of claim 50, wherein step (b) includes constraining the destination device coordinates produced by the multi-dimensional color transformation to prevent addition of chromatic colorants for black-only dots ~~in the source image~~ specified by the source device coordinates.

Claim 56 (Currently Amended): The computer-readable medium of claim 50, wherein each of the source device coordinates and destination device coordinates ~~images~~ is defined by cyan, magenta, yellow, and black (CMYK) colorants.

Claim 57 (Withdrawn): A method for multi-dimensional color transformation comprising:

generating a multi-dimensional color transformation for transformation of first color image data for a source device to second color image data for a destination device; and

applying constraints to the multi-dimensional color transformation to improve halftone dot integrity between the first color image data and the second color image data.

Claim 58 (Withdrawn): The computer-readable medium of claim 57, wherein the multi-dimensional color transformation is configured based on the constraints.

Claim 59 (New): A method for multi-dimensional color transformation comprising:

applying a multi-dimensional color transformation for transformation of source device coordinates to destination device coordinates; and

constraining the destination device coordinates to a range of matching device coordinates searched by the multi-dimensional color transformation as a function of the source device coordinates.

Claim 60 (New): The method of claim 59, wherein constraining includes constraining the destination device coordinates in the multi-dimensional color transformation to prevent removal of selected color image data specified by the source device coordinates.

Claim 61 (New): The method of claim 59, wherein constraining includes constraining the destination device coordinates in the multi-dimensional color transformation to prevent removal of selected colorants present at corresponding dots specified by the source device coordinates.

Claim 62 (New): The method of claim 59, wherein constraining includes constraining the destination device coordinates in the multi-dimensional color transformation to prevent removal of black colorant present at corresponding dots specified by the source device coordinates.

Claim 63 (New): The method of claim 59, wherein constraining includes constraining the destination device coordinates in the multi-dimensional color transformation to prevent removal of one or more chromatic colorants present at corresponding dots specified by the source device coordinates.

Claim 64 (New): The method of claim 59, wherein constraining includes constraining the destination device coordinates in the multi-dimensional color transformation to prevent introduction of selected color image data not specified by the source device coordinates.

Claim 65 (New): The method of claim 59, wherein constraining includes constraining the destination device coordinates in the multi-dimensional color transformation to prevent addition of selected colorants not present at corresponding dots specified by the source device coordinates.

Claim 66 (New): The method of claim 59, wherein constraining includes constraining the destination device coordinates in the multi-dimensional color transformation to prevent addition of black colorant not present at corresponding dots specified by the source device coordinates.

Claim 67 (New): The method of claim 59, wherein step (b) includes constraining the destination device coordinates in the multi-dimensional color transformation to prevent addition of one or more chromatic colorants not present at corresponding dots specified by the source device coordinates.

Claim 68 (New): The method of claim 59, wherein step (b) includes constraining the destination device coordinates in the multi-dimensional color transformation to prevent addition of chromatic colorants for black-only dots specified by the source device coordinates.